

Claims

What is claimed is:

1. An exercise device comprising:
 - a vertical support member having a longitudinal axis;
 - a sliding member configured to move along the vertical support member in a direction substantially parallel to the longitudinal axis;
 - a pair of rails, each of the rails having a first and second end portions, the first end portion of each rail being pivotally connected to the sliding member on the vertical support member;
 - a user support platform slidably engaged with the pair of rails; and
 - an actuation mechanism coupled to the sliding member, the actuation mechanism configured to selectively adjust the position of the sliding member relative to the vertical support member.
2. The exercise device of claim 1, wherein the actuation mechanism includes a lead screw assembly mounted adjacent the vertical support member.
3. The exercise device of claim 2, wherein the lead screw assembly includes a lead screw and a bi-directional motor having a motor shaft.
4. The exercise device of claim 3, further comprising a threaded member mounted to the sliding member, the threaded member being configured to engage the lead screw for axial movement of the threaded member along the lead screw in response to rotation of the shaft.
5. The exercise device of claim 1, further comprising a controller electrically connected to the actuation mechanism and an input device, the controller being configured to operate the actuation mechanism in response to a control signal from the input device.

6. The exercise device of claim 5, wherein the input device includes a switch electrically connected to the controller.
7. The exercise device of claim 5, wherein the controller includes a wireless receiver and the input device includes a wireless emitter to transmit the control signal to the wireless receiver of the controller.
8. The exercise device of claim 7, wherein the exercise device includes at least one handle and the input device is positioned on the at least one handle.
9. The exercise device of claim 7, wherein the input device is a remote control.
10. The exercise device of claim 7, wherein the control signal is transmitted from the wireless emitter to the wireless receiver of the controller via transmission means selected from the group consisting of infrared transmission, radio frequency transmission, and bluetooth transmission.
11. The exercise device of claim 1, wherein the actuation mechanism is adjustable from a location remote from the exercise device.
12. A variably configured exercise apparatus comprising:
 - a vertical member;
 - a guide slidably engaged with the vertical member;
 - at least one rail having a first end portion and a second end portion, the first end portion of the rail being pivotally connected to the guide;
 - a user support platform configured to engage the rail in a sliding relationship;
 - and
 - a motor-driven linear actuator operably connected to the guide and configured to selectively vary the inclination of the user support platform.

13. The exercise apparatus of claim 12, further comprising:
 - pulley means; and
 - connector means extendable through the pulley means and connecting to the user support platform,
 - wherein the rail is extendable from the vertical member and alignable such that the user support platform is rollable along the rail when the connector means is extended through the pulley means.
14. The exercise device of claim 13, wherein the connector means comprises a cable.
15. The exercise apparatus of claim 12, wherein the motor-driven linear actuator includes a motor, an elongate lead screw driven by the motor, and a drive element attached to the guide and threadedly associated with the lead screw to raise or lower the first end of the rail when the motor is operated to rotate the lead screw.
16. The exercise apparatus of claim 15, wherein the drive element comprises a drive nut.
17. The exercise apparatus of claim 15, wherein upper and lower ends of the lead screw are mounted in a generally vertical relationship to the vertical member by mounting brackets.
18. The exercise apparatus of claim 17, wherein each mounting bracket includes bearing means to support the upper and lower ends of the lead screw.
19. An adjustable exercise device comprising:
 - an upright post;
 - a set of substantially parallel rails, each rail having a first end portion configured to move in a direction substantially parallel to the upright post for adjusting the inclination of the rails;

a glide board slidably engaged with the rails; and
a drive mechanism coupled to the upper portion of the frame, the drive mechanism configured to selectively adjust the height of the upper portion of the rails and thereby change the inclination of the rails to and from any one of various inclined positions.

20. The exercise device of claim 19, wherein the drive mechanism is driven by a motor.

21. The exercise device of claim 20, wherein the drive mechanism includes:

a threaded driven member configured to engage the lead screw, the threaded driven member being attached to at least one of the first end portions; and

a lead screw having an external thread profile matching the profile of the internal thread of the threaded driven member, the lead screw configured to threadingly engage the threaded driven member such that when the motor rotates the lead screw, the first end portions of the rails are raised or lowered along the upright post.